

DETAILED ACTION

Per Applicant's Request for Continued Examination

Claims 2, 22, 38, 49 and 50 have been amended.
Claims 1, 6, 7, 10-16, 27, 28, 30-32 and 42-44 have been cancelled.
Claims 2-5, 8, 9, 17-26, 29, 33-41 and 45-50 are pending.

Per Examiner's Amendment

Claims 2, 22, 38, 49 and 50 are amended.
Claims 8, 25, 38-41 and 45-48 are cancelled.

Claims 2-5, 9, 17-24, 26, 29, 33-37 and 49-50 are allowed.

Continued Examination Under 37 CFR 1.114

I. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/31/2008 has been entered.

Response to Arguments

II. Applicant's arguments in the Remarks (pages 11-17) filed 3/31/2008 with respect to claim 2, 22, 38, 49 and 50 has been fully considered and are persuasive. Therefore the 35 USC 103(a) rejections of the claims have been withdrawn.

Examiner's Amendment

III. An Examiner's amendment to the record appears below. Should the changes and/or

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additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

IV. Authorization for this Examiner's amendment was given in a telephone interview with Atty. John Branch on May 21, 2008. Please make the following changes:

Claim 2 (Currently Amended) A method of delivering content across a plurality of zones within a network, comprising:

receiving a request from a client located within one of the plurality of zones for access to resources associated with a domain name;

determining network conditions for the network based on a determination of the load for each of the plurality of zones;

distributing the request to one of the plurality of zones based on the determined network conditions;

selecting one of a plurality of servers within the zone in which the request was distributed, the selection of the server being based on a determination for optimally balancing the load across the plurality of servers;

resolving an Internet protocol (IP) address of the selected server; and

determining whether to delegate delivery of the resources to a content delivery network based on the determination for optimally balancing the load across the plurality of servers, a Time to Live value set at a pool level for each of a plurality of available pools, and a pool load- balancing setting;

wherein selecting one of the plurality of servers further comprises: marking each of a plurality of pools to a not tried state, determining the pool load-balancing setting, selecting one of the plurality of pools that is marked to an initialization state, marking the selected one of the plurality of pools to a tried state, attempting to obtain an answer using the determined pool load-balancing on the selected one of the plurality of pools, and determining if the answer was obtained.

Claim 22 (Currently Amended) A system for balancing the load on a plurality of virtual servers that provide access to resources associated with a domain name, comprising:

a memory for storing logical instructions; and

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a processor for executing the logical instructions stored in the memory, the execution of the logical instructions causing functions to be performed, including:

receiving a request from a client located within one of the plurality of zones for access to resources associated with a domain name through an authoritative server;

determining network conditions for the network based on a determination of the load for each of the plurality of zones;

distributing the request to one of the plurality of zones based on the determined network conditions;

selecting one of the plurality of servers within the zone in which the request was distributed, the selection of the server being based on a determination for optimally balancing the load across the plurality of servers;

resolving an Internet protocol (IP) address of the selected server; and

determining whether to delegate delivery of the resources to a content delivery network based on the determination for optimally balancing the load, wherein the determination of whether to delegate delivery is made prior to a connection of the client to the content delivery network if the delivery of resources is delegated to a delegation pool associated with the content delivery network;

wherein selecting one of the plurality of servers further comprises: marking each of a plurality of pools to a not tried state, determining the pool load-balancing setting, selecting one of the plurality of pools that is marked to an initialization state, marking the selected one of the plurality of pools to a tried state, attempting to obtain an answer using the determined pool load-balancing on the selected one of the plurality of pools, and determining if the answer was obtained.

Claim 49 (Currently Amended) A system for delivering content across a plurality of zones within a network, comprising:

a processor that includes:

a receiver that receives a request from a client located within one of the plurality of zones to access resources associated with a domain name;

a means for distributing the request to one of the plurality of zones based on network conditions of the plurality of zones;

a load balancer that selects one of a plurality of servers within the zone in which the request is distributed;

a system component that resolves an Internet protocol (IP) address of the selected server;
~~and~~

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a means for determining whether to delegate delivery of the resources to a content delivery network based on a load balancing determination for optimally balancing the load across the plurality of servers or the content delivery network, wherein the plurality of servers and the content delivery network are designated members of different delegation pools of content sources; and

a means for selecting one of the plurality of servers comprising marking each of a plurality of pools to a not tried state, determining the pool load-balancing setting, selecting one of the plurality of pools that is marked to an initialization state, marking the selected one of the plurality of pools to a tried state, attempting to obtain an answer using the determined pool load-balancing on the selected one of the plurality of pools, and determining if the answer was obtained.

Claim 50 (Currently Amended) A method for delivering content over a network, comprising:

receiving a request from a client for access to resources associated with a domain name;

distributing the request to one of a plurality of zones based at least in part on network conditions associated with the zones, wherein distributing the request includes determining whether to delegate delivery of the resources to a content delivery network;

selecting one of a plurality of servers within the zone in which the request is distributed, wherein selecting the server is based at least in part on a balancing of the load among the servers;

resolving the domain name into an Internet protocol (IP) address of the selected server; and

determining whether to delegate, in a controlled manner, delivery of the resources to a content delivery network or to an origin site based on the balancing of the load and a mapping created between pools of content sources and an identified physical geographic location of an IP address of the request;

wherein selecting one of the plurality of servers further comprises: marking each of a plurality of pools to a not tried state, determining the pool load-balancing setting, selecting one of the plurality of pools that is marked to an initialization state, marking the selected one of the plurality of pools to a tried state, attempting to obtain an answer using the determined pool load-balancing on the selected one of the plurality of pools, and determining if the answer was obtained.

Cancel: Claims 8, 25, 38-41 and 45-48.

Reasons for Allowance

The following is the Examiner's statement of reasons for allowance

V. The prior art or record fails to teach neither singly nor in combination, the claimed limitations of: “determining whether to delegate, in a controlled manner, delivery of the resources to a content delivery network or to an origin site based on the balancing of the load and a mapping created between pools of content sources and an identified physical geographic location of an IP address of the request; wherein selecting one of the plurality of servers further comprises: marking each of a plurality of pools to a not tried state, determining the pool load-balancing setting, selecting one of the plurality of pools that is marked to an initialization state, marking the selected one of the plurality of pools to a tried state, attempting to obtain an answer using the determined pool load-balancing on the selected one of the plurality of pools, and determining if the answer was obtained” stated in independent claims 2, 22, 38, 49 and 50 (see Specification pages 26, 34, 36 and 41-43).

Although prior art of record *Zisapel et al* (US 6,249,801), *Wolf et al* (US 6,374,297), and *Miller et al* (US 7,197,547) disclose load balancing network systems and methods for distributing the load across multiple servers or server farms, the prior art fails to specifically teach selecting one of the plurality of servers further by marking each of a plurality of pools to a not tried state, determining the pool load-balancing setting, selecting one of the plurality of pools that is marked to an initialization state, marking the selected one of the plurality of pools to a tried state, attempting to obtain an answer using the determined pool load-balancing on the selected one of the plurality of pools, and determining if the answer was obtained. This limitation, in conjunction with other limitations in the independent and dependent claims, is not

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specifically disclosed or remotely suggested in the prior art of record. A review of Claims 2-5, 9, 17-24, 26, 29, 33-41 and 45-50, in view of the Examiner's remarks above, indicates that these claims are allowable over the prior art of record.

Any comments considered necessary by Applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

VI. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Kristie Shingles whose telephone number is 571-272-3888. The Examiner can normally be reached on Monday-Friday 8:30-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, Rupal Dharia can be reached on 571-272-3880. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Kristie D. Shingles

Examiner

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Supervisory Patent Examiner, Art Unit 2151